

REMARKS

This amendment responds to the official action mailed October 20, 2009 and is accompanied by a petition for extension under 37 C.F.R. §1.136(a) (two months) and the necessary official fee.

In the official action, claims 1, 2, 8, 9, 12 and 32-34 were finally rejected as allegedly unpatentable over US 5,111,994 – Gonzalez under 35 U.S.C. §103. Applicant requests reconsideration and allowance of the claims because Gonzalez taken alone, or considered in conjunction with the Examiner's articulation of the grounds of rejection in the official action, does not meet the invention disclosed and claimed as a whole by applicant. In the alternative, applicant requests that this amendment be entered of record for purposes of appeal.

A rejection of a claim on grounds of obviousness must address all the limitations of the rejected claim (i.e., the claim as a whole). See 35 U.S.C. §103(a). An official action asserting a rejection on grounds of obviousness must cite one or more prior art references that disclose all of the aspects claimed. If relying on a combination of aspects found in separate prior art references, or if positing a modification of aspects found in one or more prior art references, the official action must present a logical explanation articulating how and why a person of ordinary skill might routinely combine or modify the aspects disclosed in the prior art references, to reach the invention claimed as a whole.

The rejection in the present official action is insufficient, because the disclosure of Gonzalez does not meet the aspects particularly stated in independent claim 1. Explanations in the official action attempting to apply aspects of claim 1 to Gonzalez have no basis in fact. Gonzalez does not in fact disclose the subject matter that the official action asserts Gonzalez to disclose. The official action lacks an articulated explanation of how one can even suggest that Gonzalez might be construed to disclose the subject matter claimed as a whole.

Applicant's elected embodiments are shown in Figs. 4 and 7-14. Referring to Fig. 7, element 64 is applicant's hub (claim 1, line 7), having an axial passage 40 that

functions as the air intake (claim 1, line 8). The air passes in a direction opposite water flow (upwardly in Fig. 7) through the axial passage 40 traversing the length of the hub, then through the space between the top surface of hub 64 and the underside of the perforated plate 60 above the top end of the hub 64. The air is entrained with water flowing through the openings 63 in disk 60 (downwardly in Fig. 7). Aerated water flows along the lateral outside surfaces 66 of hub 40. The flow of aerated water encounters the outward deflecting surface 68 on the exterior of the hub at the base 67 of the hub. The exterior of the hub has essentially axially arrayed guides, and directs discrete aerated jets outwardly from the hub toward apertures in the plate 50, from which apertures the jets exit the shower head.

According to the official action, a theoretical section from flange 21 to flange 102 of Gonzalez' aerator 14 is a hub as claimed by applicant. The seatings for O-rings 22 and 24 in Gonzalez are axially arranged guides. However, such a construction and application of the claimed elements to Gonzalez is not logical. Gonzalez does not meet the invention claimed.

In Gonzalez, air flows into central passage 17 (Gonzalez Fig. 2), radially outwardly through the passage at openings 25 and is entrained with air flowing from water line 100 through venturis that terminate in turbulent chambers feeding the spray emitting orifices, directly and also through lateral passages 32. Referring to Gonzalez' Fig. 1, it can be said that the axially innermost tube is a hub, having an axial passage 23 for air intake, and water flowing along the outer surface of that tube. But there is no disclosure or suggestion of any structure on the exterior of the tube (hub) having axially arranged guides or a deflector arranged on a base of the hub, or any means whatsoever for guiding discrete jets outwardly toward apertures from which the jets exit.

According to the official action, the seatings for O-rings 22, 24 are essentially axially arranged guides as claimed. But the O-rings are on the outside of the entire element 14, where water cannot flow. The O-rings are not located in the zone outside of the tube defining air intake passage 23, and are isolated from the zone where water flows and might deflect. If one construes the O-ring seatings as guides, they are not located as claimed by applicant. The O-rings and their seats are not aligned or

elongated in an axial direction. The O-rings and their seats are circumferential. The O-rings seats are not configured as claimed by applicant function as guides, i.e., to orient the flow of water. O-rings are seals that prevent flow between sealed surfaces. Seals that obstruct flow in such a manner cannot reasonably be regarded as guides for directing flow.

Assuming that the Examiner uses the term "O-ring seatings" to refer to the annular outer tube of Gonzalez' aerator 14 as opposed to the O-rings and their seats per se, claim 1 still is not met, because Gonzalez neither discloses nor suggests axially arrayed guides and a deflector arranged on a base of the hub for guiding discrete aerated jets outwardly from the hub toward the apertures from which the jets exit the jet disk.

A deflector on a base of applicant's hub directs the flow of discrete aerated jets, outwardly from the hub toward apertures in the shower head plate. However in Gonzalez, the aeration structures, namely the venturis that entrain air into the water flow at passage 25, are directed along passageways that increase in cross-section up to the back side of the front plate of the spray head, where a turbulent chamber is maintained. There is nothing in this flow area that even resembles a deflector.

Although there are jets 5 emitted at central area of the spray head in Gonzalez, those jets originate in the turbulent chambers on the back side of the front plate. There is no disclosure or suggestion of discrete aerated jets formed on the outside surfaces of a hub with a deflector as claimed by applicant.

All the various Gonzalez jet orifices are all fed from the turbulent chambers. A "U-shaped" flow path is specifically mentioned at Gonzalez col. 2, line 9 and is evident in Figs. 2 and 4. A turbulent and U-shaped flow is inevitable in Gonzalez, where the flow is directed into dead end chambers, but for very narrow spray orifices. Note that openings 32, 70, 72, which define substantially larger flow orifices into other chambers, are spaced backward or upstream from the dead end backside of the plate with small jet orifices adjacent to the air intake 17 in Fig. 2. The flow is turbulent and the Gonzalez aerator 14 cannot form discrete jets as claimed.

Claim 1 recites aspects that cannot be found in cited US Patent 5,111,994 - Gonzalez or in the other citations of record. Even when construing the claim language as broadly as possible, consistent with applicant's specification, it is not reasonably possible to read the claim language on structures in the prior art that are different than the structures claimed, and are neither intended to produce similar benefits nor capable of doing so.

Claim 1 is properly patentable over the prior art of record. Claims 2, 8, 9 ,12 and 32-34 are properly allowable at least due to their depending on claim 1. Applicant requests that the claims be allowed.

This amendment relies on distinctions that have been claimed and argued prior to this point in the prosecution of this application. Applicant requests that this amendment be entered of record, at least for purposes of appeal.

The differences between the invention and the prior art are such that the subject matter claimed as a whole is not shown to have been known or obvious. Claims 1, 2, 8, 9 ,12 and 32-34 are allowable. Reconsideration and allowance are requested.

Respectfully submitted,

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